Wyandotte County

July 2015

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 30 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Wyandotte County economy.[1] These 30 sectors have a total direct output of approximately $892 million and support 2,286.1 jobs in Wyandotte County. Running the model for all 30 sectors simultaneously produces the following results:

Agriculture Contribution in Wyandotte County

Impact Type[2]	Employment	% of Total Employment	Total Value Added[3]	% of Gross Regional Product[4]	Output[5]	% of Gross Regional Product
Direct Effect	2,286.1	2%	$215,018,934	2%	$892,333,831	10%
Indirect Effect	1,211.5	1%	$110,516,595	1%	$209,041,074	2%
Induced Effect	593.0	1%	$43,343,613	0%	$72,519,565	1%
Total Effect	4,090.6	4%	$368,879,141	4%	$1,173,894,470	13%

As shown in the above table, agriculture, food, and food processing supports 4,090.6 jobs, or 4% of the entire workforce in the county. These industries provide a total economic contribution of approximately $1174 million, roughly 13% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 30 agriculture, food, and food processing sectors is approximately $369 million, or 4% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 4% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:
https://implan.com/index.php?option=com_content&view=category&id=19

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

4 GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

5 Output = Intermediate Inputs + Value Added

In the top ten by employment, Landscape and horticultural services is the top employer in the agriculture industry with 573.0 employees. This table also shows the amount of jobs that are created by the agriculture industry in Wyandotte County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Landscape and horticultural services	573.0	$42,208,650
Bread and bakery product, except frozen, manufacturing	375.4	$51,920,047
Wholesale trade	305.0	$62,852,383
Cookie and cracker manufacturing	289.4	$108,048,285
Truck transportation	262.5	$38,243,457
Meat processed from carcasses	226.6	$108,588,436
Rendering and meat byproduct processing	128.4	$80,405,154
Other animal food manufacturing	111.2	$167,139,464
Bottled and canned soft drinks & water	97.9	$79,978,860
Employment services	78.9	$2,999,566

The Other animal food manufacturing industry directly contributes approximately $167 million to Wyandotte County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Other animal food manufacturing	111.2	$167,139,464
Meat processed from carcasses	226.6	$108,588,436
Cookie and cracker manufacturing	289.4	$108,048,285
Rendering and meat byproduct processing	128.4	$80,405,154
Bottled and canned soft drinks & water	97.9	$79,978,860
Wholesale trade	305.0	$62,852,383
Flour milling	34.0	$53,756,257
Bread and bakery product, except frozen, manufacturing	375.4	$51,920,047
Nitrogenous fertilizer manufacturing	19.9	$45,685,456
Landscape and horticultural services	573.0	$42,208,650

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Wyandotte County's economy.

Sector Description:	Employment	Output
Oilseed farming	2.3	$1,560,090
Grain farming	8.6	$962,026
Vegetable and melon farming	5.0	$305,133
Greenhouse, nursery, and floriculture production	35.8	$2,010,769
All other crop farming	10.8	$436,609
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	16.2	$1,341,659
Poultry and egg production	1.1	$171,794
Animal production, except cattle and poultry and eggs	53.4	$1,725,115
Dog and cat food manufacturing	28.3	$35,616,670
Other animal food manufacturing	110.7	$166,374,883
Flour milling	33.6	$53,039,621
Frozen fruits, juices and vegetables manufacturing	15.5	$7,016,802
Canned fruits and vegetables manufacturing	52.7	$26,928,365
Meat processed from carcasses	223.2	$106,990,252
Rendering and meat byproduct processing	120.3	$75,311,599
Bread and bakery product, except frozen, manufacturing	375.2	$51,896,863
Frozen cakes and other pastries manufacturing	5.1	$770,998
Cookie and cracker manufacturing	287.7	$107,395,983
Tortilla manufacturing	1.5	$341,895
All other food manufacturing	38.6	$15,442,968
Bottled and canned soft drinks & water	97.9	$79,973,695
Sawmills	19.5	$4,360,904
Paper mills	3.9	$2,578,234
Nitrogenous fertilizer manufacturing	19.7	$45,140,767
Pesticide and other agricultural chemical manufacturing	18.3	$29,010,343
Farm machinery and equipment manufacturing	10.5	$6,504,160
Food product machinery manufacturing	77.1	$22,627,184
All other industrial machinery manufacturing	8.4	$2,199,440
Veterinary services	46.0	$3,106,030
Landscape and horticultural services	559.2	$41,192,981
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All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.